WHAT IS CLAIMED IS:

- 1. A method of inhibiting inflammation comprising administering to a cell a monoterpene composition that inhibits NF-κB.
- 5 2. The method of claim 1, wherein said NF-κB is induced by TNF.
 - 3. The method of claim 1, wherein said composition further comprises a carrier moiety.
- 10 4. The method of claim 3, wherein said carrier moiety comprises a lipid.
 - 5. The method of claim 3, wherein said carrier moiety comprises a membrane permeable composition.
 - 6. The method of claim 3, wherein said carrier moiety comprises a sugar.
 - 7. The method of claim 3, wherein said carrier moiety comprises a triterpene moiety.
- 8. The method of claim 1, wherein the monoterpene composition further comprises a triterpene moiety.
 - 9. The method of claim 1, wherein the monoterpene composition further comprises a sugar.
- The method of claim 1, wherein the monoterpene composition further comprises a second monoterpene moiety.

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 11. The method of claim 8, wherein said triterpene moiety comprises the formula:

$$\begin{array}{c} R_{19} \\ R_{17} \\ R_{18} \\ R_{20} \\ R_{21} \\ R_{22} \\ R_{23} \\ R_{24} \\ R_{24} \\ R_{25} \\ R_{26} \\ R_{35} \\ R_{35} \\ R_{36} \\ R_{35} \\ R_{36} \\ R_{35} \\ R_{36} \\ R_{35} \\ R_{36} \\ R_{36$$

, or an isomer thereof wherein,

- a) R₁ and R₂ are selected from the group consisting of hydrogen, C1-C5 alkyl, C1-C5 alkylene, C1-C5 alkyl carbonyl, a sugar, an oligosaccharide;
- b) wherein R_3 - R_{36} are each separately and independently selected from the group consisting of a point of unsaturation, hydrogen, hydroxyl, C1-C5 alkyl, C1-C5 alkylene, C1-C5 alkyl carbonyl, a sugar, C1-C5 alkyl ester, and a monoterpene group; and
- c) at least one of R₃-R₃₆ is a monoterpene group.
- 12. The method of claim 11, wherein R_1 and R_2 each comprise an oligosaccharide.
- The method of claim 12, wherein R₁ and R₂ each comprise a monosaccharide, a disaccharide, a trisaccharide or a tetrasaccharide.
 - 14. The method of claim 13, wherein R₁ and R₂ each comprise an oligosaccharide comprising sugars which are separately and independently selected from the group consisting of glucose, fucose, rhamnose, arabinose, xylose, quinovose, maltose, glucuronic acid, ribose, N-acetyl glucosamine, and galactose.

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16. The method of claim 11, wherein R₄ is attached to the triterpene moiety through one of the methylene carbons attached to the triterpene moiety.

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17. The method of claim 11, wherein said triterpene moiety further comprises at least one double bond.

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The method of claim 11, wherein said isomer is a stereoisomer.

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The method of claim 11, wherein said isomer is an optical isomer.

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20. The method of claims 7 or 8, wherein said triterpene moiety is an acacic acid ester, a oleanolic acid ester, a betulinic acid ester, an ursolic acid ester, a quinovic acid ester, a pomolic acid ester, a rotundic acid ester, a rotungenic acid ester, a madasiatic acid ester, an asiatic acid ester, an euscaphic acid ester, a tormentic acid ester, madecassic acid ester, a lupeolic acid ester, a cylicodiscic acid ester, a mollic acid ester, a jessic acid ester, an echinocystic acid ester, or an entagenic acid ester.

21.

The method of claim 1, wherein said monoterpene moiety comprises the formula:

$$O_2C$$
— CH — CH_2 — CH_2 — CH — CH — CH — CH_2
 CH_2OH
 $O-R_3$

, or an isomer thereof wherein,

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a) R₃ is selected from the group consisting of hydrogen, hydroxyl, C1-C5 alkyl, C1-C5 alkylene, C1-C5 alkyl carbonyl, a sugar, and a monoterpene group; and

- b) the formula further comprises R₄, wherein R₄ is selected from the group consisting of hydrogen, hydroxyl, C1-C5 alkyl, C1-C5 alkylene, C1-C5 alkyl carbonyl, a sugar, C1-C5 alkyl ester, and a monoterpene group.
- 5 22. The method of claim 21, wherein said isomer is a cis isomer.
 - 23. The method of claim 1, wherein said isomer is a trans isomer.
 - 24. The method of claim 21, wherein R_3 is a sugar.
 - 25. The method of claim 24, wherein the sugar is selected from the group consisting of glucose, fucose, rhamnose, arabinose, xylose, quinovose, maltose, glucuronic acid, ribose, N-acetyl glucosamine, and galactose.
 - 26. The method of claim 24, further comprising a monoterpene moiety attached to the sugar.

- 27. The method of claim 21, wherein R₃ has the following formula:
- , wherein R5 is selected from the group consisting of hydrogen, hydroxyl, C1-C5 alkyl, C1-C5 alkylene, C1-C5 alkyl carbonyl, a sugar, C1-C5 alkyl ester, and a monoterpene group.

- 28. The method of claim 27, wherein R_5 is a hydrogen or a hydroxyl.
- 29. The method of claim 21, wherein said isomer is a stereoisomer.
- 5 30. The method of claim 21, wherein said isomer is an optical isomer.
 - 31. The method of claim 21, wherein R₃ has the following formula:

32. The method of claim 21, wherein R₃ has the following formula:

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33. The method of claim 1, wherein said composition comprises the formula:

$$CO_2$$
 OH
 R_2

or an isomer thereof, wherein,

- a) R₁ and R₂ are selected from the group consisting of hydrogen, C1-C5 alkyl, and an oligosaccharide;
- b) R₃ is selected from the group consisting of hydrogen, hydroxyl, C1-C5 alkyl, C1-C5 alkylene, C1-C5 alkyl carbonyl, a sugar, and a monoterpene group; and
- c) the formula further comprises R₄, wherein R₄ is selected from the group consisting of hydrogen, hydroxyl, C1-C5 alkyl, C1-C5 alkylene, C1-C5 alkyl carbonyl, a sugar, C1-C5 alkyl ester, and a monoterpene group, and wherein R₄ may be attached to the triterpene moiety or the monoterpene moiety.
- 34. The method of claim 33, wherein said isomer is a stereoisomer.
- 20 35. The method of claim 33, wherein said isomer is an optical isomer.
 - 36. The method of claim 1, wherein said composition comprises the formula:

37. The method of claim 1, wherein said composition comprises the formula:

38. The method of claim 1, wherein said composition comprises the formula:

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39. The method of claim 1, wherein said inflammatory responses are inhibited when said composition is administered to said cell at a concentration of from about 0.5 to about 2.0 μg/ml.

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- 40. The method of claim 1, wherein said cell is in a subject having an inflammatory disease.
- 41. The method of claim 40, wherein said subject is a human.

42. The method of claim 40, wherein said inflammatory disease is selected from the group comprising premalignant inflammatory disease, arthereosclerosis, rheumatoid arthritis, osteoarthritis, multiple sclerosis, Parkinson's disease, and Alzheimer's disease.

- 43. The method of claim 42, wherein said premalignant inflammatory disease is Barretts esophagitis, inflammatory bowel disease, chronic pancreatitis, chronic prostatitis, familial polyposis, actinic keratosis.
- 44. The method of claim 1, wherein said composition inhibits COX-2.
- 45. The method of claim 1, wherein said composition inhibits iNOS.
- 46. The method of claim 1, wherein said administering is local.
- 47. The method of claim 46, wherein said administering is by injection.
- 48. The method of claim 46, wherein said administering is topical.
- 25 49. The method of claim 1, wherein said administering is systemic.
 - 50. The method of claim 1, wherein said administering is oral.

- 51. The method of claim 1, wherein said composition is a pharmaceutical composition in a pharmacologically acceptable medium.
- 52. The method of claim 51, wherein said pharmacologically acceptable medium is a buffer, a solvent, a diluent, an inert carrier, an oil, a creme, or an edible material.
 - 53. The method of claim 52, wherein said pharmaceutical composition further comprises a targeting agent.
 - The method of claim 53, wherein said targeting agent directs delivery of said pharmaceutical composition to an inflamed cell.